

HIR98-1488D

REMARKS

Claims 1-36 are pending in the present Application, claim 1, 6, 14, 27, and 36 have been amended, claims 4, 5, 7, 13, 15, 16, 23, and 32 have been canceled, leaving claims 1-3, 6, 8-12, 14, 17-22, 24-31, and 33-36 for consideration. Support for the amendments to claims may be found in the canceled claims. Reconsideration and allowance of the claims is respectfully requested in view of the above amendments and the following remarks.

Claim Rejections Under 35 U.S.C. § 102(b)

Claims 1-5, 7, 12, 17-19, 21-27, and 29-35 stand rejected under 35 U.S.C. § 102(b), as allegedly anticipated by U.S. Patent 4,602,054 to Kang et al. (Kang). Applicants respectfully traverse this rejection.

Kang discloses admixing about 0.5 to about 10.0 parts per hundred parts of rubber of bis(2-mercaptobenzothiazato) nickel with a vulcanizable rubber prior to combining the rubber with metal and curing. (Abstract) Applicants respectfully point out that Claim 1, as amended, does not recite bis(2-mercaptobenzothiazato) nickel among the possible moment activators. Kang discloses that 2-mercaptobenzothiazole is required for the synthesis of bis(2-mercaptobenzothiazato) nickel but does not disclose use of 2-mercaptobenzothiazole in a composition.

To anticipate a claim under 35 U.S.C. § 102, a single source must contain all of the elements of the claim. *Lewmar Marine Inc. v. Bariant, Inc.*, 827 F.2d 744, 747, 3 U.S.P.Q.2d 1766, 1768 (Fed. Cir. 1987), *cert. denied*, 484 U.S. 1007 (1988). As Kang does not teach the use of any of the moment activators in combination with a base material as is instantly claimed, Kang does not anticipate the claimed composition. Applicants respectfully request withdrawal of the rejections under 35 U.S.C. § 102(b).

Claims 1-6, 8-12, 17, 18, 21, 22, 25, 29-31, 33, 35, and 36 stand rejected under 35 U.S.C. § 102(b), as allegedly anticipated by U.S. Patent 4,430,466 to Cooper. Applicants respectfully traverse this rejection.

Cooper discloses the use of benzothiazyl sulfenamides as vulcanization accelerators at levels greater than 1.5 phr and refers to accelerators described in U.S. Patent No. 3,852,250. (Col. 3, line 61 to Col. 4, line 34) U.S. Patent No. 3,852,250 discloses a 3 part accelerator

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system that can be used in amounts up to 5.5 parts per 100 parts uncompounded rubber. Cooper further discloses that up to 5 parts by weight benzothiazyl sulfenamides can be used. (Col. 5, lines 21-30) Thus it is clear that the maximum amount of benzothiazyl sulfenamides taught by Cooper is 5 parts by weight. The amended claim 1 requires at least twice that amount, thus Cooper does not anticipate the instant claims.

Claims 1, 2, 4-8, 12-23, 25-27, and 29-35 stand rejected under 35 U.S.C. § 102(b), as allegedly anticipated by U.S. Patent 5,439,512 to Kamijima. Applicants respectfully traverse this rejection.

As summarized by the Examiner, Kamijima teaches a composition of an anti-fouling paint that uses acrylic rubber with DCHBSA. While Applicants dispute the Examiner's characterization that the composition of Kamijima undergoes energy conversion, nonetheless Applicants have amended the claims to add the requirement that the energy conversion material be in the form of a sheet, fiber or combination thereof. Because Kamijima discloses an anti-fouling paint and does not disclose sheets, fibers or a combination thereof, Kamijima does not anticipate the amended claims.

Claim Rejections Under 35 U.S.C. § 103(a)

Claim 28 stands rejected under 35 U.S.C. § 103(a), as allegedly unpatentable over U.S. Patent 4,602,054 to Kang et al. (Kang) in view of U.S. Patent No. 4,218,349 to Minatono. Similarly Claim 28 stands rejected under 35 U.S.C. § 103(a), as allegedly unpatentable over U.S. Patent 4,430,466 to Cooper in view of U.S. Patent No. 4,218,349 to Minatono. Applicants respectfully traverse these rejections.

As discussed above while Kang teaches use of a bis(2-mercaptobenzothiazato) nickel compound in a rubber composition, Kang does not teach the use of 2-mercaptobenzothiazole in a rubber composition. Cooper employs benzothiazyl sulfenamides in less than half the claimed amount. Minatono has been cited for its teaching with regard to the applicability of tire compositions for shoe sole applications and does not disclose the use of 2-mercaptobenzothiazole or benzothiazyl sulfenamides in a rubber composition.

For an obviousness rejection to be proper, the Examiner must meet the burden of establishing a *prima facie* case of obviousness. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir.

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1988). Establishing a prima facie case of obviousness requires that all elements of the invention be disclosed in the prior art. *In Re Wilson*, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970). Minatono does not rectify the deficiency of Kang or Cooper and as a result a prima facie case of obviousness has not been established because not all elements of the claims have been disclosed.

It is believed that the foregoing amendments and remarks fully comply with the Office Action and that the claims herein should now be allowable to Applicants. Accordingly, reconsideration and allowance is requested.

If there are any additional charges with respect to this Amendment or otherwise, please charge them to Deposit Account No. 06-1130 maintained by Applicants' attorneys.

Respectfully submitted,

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